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EL7001-8

Dr. Glen Gatin

Principles and Practices of E-Learning

Assignment #7: Research and Practices in e-Learning

Comments: none at this time

Faculty Use Only

You have met the basic requirement for the activity, Michael. Your ideas are well organized although your focus is diffused. Continue to work on simplifying word choices and mechanical constructions. Concentrate on the theories of online learning and the research conducted to test and verify those theories. Focus less on issues of practice or administration.

Choose one theory to examine in depth rather than generalizing about theories on a superficial level. Describe how the theory works to explain and predict behavior in an online learning environment. Use the theory to frame an analysis of the topic at hand. Support your arguments with current peer-reviewed research relating to the testing and verification of the theory. Identify specific gaps in the existing research.

Gatin

August 6, 2013

Research and Best Practices in e-Learning

Michael Higley

North Central University

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Research and Best Practices in e-Learning

Introduction

Educational institutions, in the 21st century, now use technology to help define how and where learning happens in online learning environments. e-Learning, is thought by many outside

the online learning community, to be an online only environment where there is a disconnect between teacher-student interactions and is mostly asynchronous distance learning (Hawkins, Graham, & Barbour, 2012). However, the e-learning experience is much more than the perceived disconnect and is shaped by the pedagogy and best practices of educational practitioners around the world. Variations of e-learning approaches can be found in institutions like the public school systems to learning abroad, and is often define by the learner's perspectives, technology understanding, and metacognitive awareness.

Teaching and learning in an online environment happens differently than in a traditional classroom and can present challenges to teachers and learners new to the experience. Over the last decade the use of information and communication technologies (ICT) and the transformational impact of internet connectivity “has caused e-learning practices to evolve significantly” in education (Sangra, Viachopoulos, and Cabera, 2012, p. 146). The constant evolution of learning online, as a result of new technologies and the rapid growth of connectivity is an ongoing process and presents a major challenge for educational institutions.

The purpose of this paper is to discuss the challenges related to a constantly changing online learning environment and its best practices. Additionally the paper will attempt to (a) identify the need for ongoing research and scholarly discourse, (b) discuss the learning opportunities, (c) best practices of an e-learning environment and finally, the paper will conclude by summarizing the major points and ideas derived from the reviewed literature.

Research

The impact of information and communication technologies (ICT) on traditional classroom environments and educational practices has created a growing demand for an ongoing scientific understanding of teaching and learning best practices. Ongoing research and literature

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Use the ampersand in parenthetical materials.

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Comment [5]: The focus of doctoral level scholarship must be the theories and research rather than practices or even research into practices.

are the keys to effective teaching and learning online (Wu, Xu, and Ge, 2012). The importance of inquiry can be summed up by defining it as an infrastructure that supports “a range of academic practices including scholarly activity, theory building, empirical research and dissemination, aimed at both furthering understanding and influencing policy-making across the education sectors” (Pachler & Daly, 2011, p. 129). According to Wan, Compeau, and Haggerty (2012), “research has shown that 50 percent of all employee skills become outdated within three to five years.” The cycle is even shorter for information technology and its use in online education (p. 308). Therefore, the demand is rapidly growing for ongoing research to determine best practices and effective online instruction. Due to the constant growth of technology and its use in education the need to understand how to best integrate emerging ICT into teaching and learning become imperative to effective educational pedagogy.

e-Learning can be divided into several categories from informal and self-paced learning to an online extension of the traditional classroom environment providing both synchronous and asynchronous learning interactions. Learning online is no longer a “one size fits all” approach and requires ongoing research by scientists and educational scholars around the world (Pachler & Daly, 2011). There are several methodologies and approaches to the study of learning online, however there are three commonly addressed themes around most online studies: pedagogical, technical, and operational (Cochran, 2009; Pachler & Daly, 2011). These major themes are those most often addressed during scholarly study and discourse related to learning online. The methods of research can also be widely different and the outcomes unique depending on the types of articles, theories, and questions asked. Creswell (2013) notes, “that by studying qualitative articles in journals we can see that research questions framed from grounded theory look different than questions framed from a phenomenological study” (p. 2). Scholars endlessly

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Comment [8]: Excellent quote! That is exactly the scholars job.
Focus on the theory building and empirical research.

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Comment [9]: Redundant. The next sentence essentially repeats this information.

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Comment [10]: ..becomes

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Comment [11]: Avoid hyperbole.

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Comment [13]: Use the active voice.

Three common themes are addressed in the study of online learning: pedagogical, technical and operational.

For doctoral scholars the most important is the first, practitioners and administrators are concerned with the technical and operational.

collect information and apply theories to online learning in hopes of gaining an in-depth understanding of the many layers of learning and best practices, which exist in educational learning environments. These are just a few of the research challenges created with a constantly changing

Opportunities

Learning online environments serve many different types of learning abilities and provide many potential learners with the opportunity to access skills and information not easily available or affordable in traditional classroom environments. Distance learning is also becoming a crucial and important means of instruction and is expanding significantly at the college and university levels (Brady, Holcomb, & Smith, 2010). Not only is online learning becoming more popular its learning environment can accommodate a magnitude of learner types from self-paced learners to leader-led learning situations. Online learning environments provide learners with anonymity, asynchronous interactions, and easy accessibility to ICT, which enhance the learning experience (Cook & Sutton, 2012). This learner controllability and exposure helps explain why the online learning environment is such a desired learning infrastructure.

Best Practices

“The best practice in education is the most efficient (least amount of effort) and effective (best results) way by which society transmits its accumulated knowledge and skills from one generation to another” (Baghdadi, 2011). Technology is currently being used to compliment educational learning experiences and develop new modes of learning. According to social cognitive theory, individual and contextual factors are assumed to affect learning behaviors. Therefore, an effective online teaching environment incorporates a variety of strategies and best practices unique to the learner in online learning environments. Consequently the differences in

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Comment [14]: Incomplete sentence.

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Comment [16]: It is important to distinguish between distance education and online learning. Different disciplines.

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2010). e-Learning, online learning, and distance learning environments: Are they the same? *Internet and Higher Education*, 14(Oct), 129–135.

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Comment [18]: Interesting! How does anonymity enhance the learning experience? What theory explains this phenomena? How has that theory been tested with empirical research in an online learning context? What gaps remain in the research?

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teaching practices can change based on learning interactions, content, learning expectations, and type of online learning environment available (Cook & Sutton, 2012; Martin, 2009; Wu et al., 2012). Within this context it is important to address student motivation, teacher-student interactions, student-to-student collaboration, the types of technology resources used, and course design. In addition to social cognitive learning theory the basic needs theory and transactional distance theories help frame the best practices and characteristics to effective online learning environments. These best practice examples are merely a few of the examples found in the reviewed literature and all have a profound impact on e-learning environments (Cook & Sutton, 2012; Martin, 2009; Wu et al., 2012).

Motivation and Interactions

Asynchronous and synchronous virtual interactions help to motivate online learners (Martin, 2009). Online learners often have anxiety and need to feel connected to their teachers and safe in their learning environments (Cook & Sutton, 2012). To promote student motivation and address learner anxiety the role falls to the teacher to anticipate and prevent motivational challenges unique to the e-learning experience. Increasing online face-to-face interactions by the use of informational resource applications like Facetime and Skype are considered to be a best practice when addressing this learner need (Cook & Sutton, 2012).

Teachers should also expect learners to work within collaborative e-learning communities where they are interacting with the teacher and more importantly with each other. Encouraging learners to participate in scholarly discourse and the sharing of ideas helps develop like-minded scholars and is considered another best practice of online learning and teaching (Martin, 2009; Wu et al., 2012).

Resources

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How do these theories work to explain and predict behavior (the job of a theory)? How have these theories been adapted for an online learning environment? How have the theories been tested in on online learning context? What gaps exist in the research?

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Comment [23]: What theories support this type of intervention?
See for example:

Yeager, D. S., & Dweck, C. S. (2012). Mindsets That Promote Resilience: When Students Believe That Personal Characteristics Can Be Developed. *Educational Psychologist*, 47(4), 302–314. doi:10.1080/00461520.2012.722805

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Comment [25]: Why is this important?

In addition to learner motivation and student interactions e-learning should also incorporate various forms of social media and Web2.0 applications like google docs, Facebook, Skype, and the countless cloud sharing resources available to address the different levels of technology use by today's online learners (Cook & Sutton, 2012). As stated earlier in the paper there is not a "one size fits all" approach to e-learning. Creating lesson objectives that can be completed successfully using different types of technology applications is another way online environments can meet the individual needs of its learners. Allowing learners to select the technologies they are most familiar with will help develop a higher degree of comfort using unfamiliar technologies, which can be used for more rigorous and problem based assignments (Martin, 2009; Wu et al., 2012).

Conclusion

Research into the approaches and best practices of online learning is constantly changing with the rapid growth of new technologies and online connectivity. It is an ongoing process of research and practice, which has presented a major challenge to educational institutions and scholars for the last decade. It has been shown that the technology used in online learning environments is advancing faster than practitioners are able to effectively apply the changes and practices. Although this is a challenge facing education today the opportunities that online environments provide, the type of learners it can effectively reach, and the potential number of learners, which can be affected, give online learning, in education, an edge over traditional classroom learning environments.

Additionally, there is an obvious and noted gap between the growing research regarding the adoption of online learning environments, the need for ongoing professional development, and the lack of time devoted to developing and applying the research findings (Pachler & Daly,

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Comment [26]: Google is a proper noun.

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Comment [27]: ..with which they are most familiar..

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Comment [28]: Introduce the theory that you will be using to frame your analysis in your introduction and then make sure your conclusion summarizes your arguments about the theory.

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2011). There is a need for more research and study in this area and over time scholars and scientists will become more proficient in researching the practice and application of the challenges and best practices facing e-learning today.

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Comment [31]: More research and study is needed.

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Comment [32]: Capitalize only the first word of the title and subtitle.

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Comment [33]: Capitalize only major words.

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